

WHAT IS CLAIMED IS:

1. An extrudable thermoplastic superabsorbent polymer blend composition comprising

- 5 (a) one or more superabsorbent polymer and
(b) one or more thermoplastic resin comprising a functional group which interacts ionically or covalently with (a).

2. The extrudable thermoplastic superabsorbent polymer blend composition of Claim 1 having a melt draw down rate between about 5 and about 100 feet per minute and a
10 melt tension between about 0.1 and about 10 under temperature and applied load conditions that give a melt flow rate of between about 0.1 and about 300 g/10 min.

3. The extrudable thermoplastic superabsorbent polymer blend composition of Claim 1 wherein the superabsorbent polymer is prepared from water-soluble α,β -ethylenically unsaturated monomers.

15 4. The extrudable thermoplastic superabsorbent polymer of Claim 3 wherein the α,β -ethylenically unsaturated monomers is a monocarboxylic acid, a vinyl polycarboxylic acid, an acrylamide or mixtures thereof.

5. The extrudable thermoplastic superabsorbent polymer blend composition of Claim 1 wherein the superabsorbent polymer is a cellulosic-graft copolymer, a starch-graft
20 copolymer, a starch-g-poly(acrylic acid), a polyacrylamide; a polyvinyl alcohol, a poly(acrylic acid), a copolymer of sulfonic acid group containing monomer, or mixtures thereof.

6. The superabsorbent polymer of Claim 5 is crosslinked, partially neutralized, surface treated or combinations thereof.

25 7. The extrudable thermoplastic superabsorbent polymer blend composition of Claim 1 wherein the thermoplastic resin is a polyacrylic acid, ethylene and acrylic acid copolymer, ethylene, t-butylacrylate and acrylic acid terpolymer, ethylene and methacrylic acid copolymer, ionomers of ethylene and methacrylic acid copolymers, ethylene, vinyl acetate and carbon monoxide terpolymer, ethylene and carbon monoxide copolymer,
30 ethylene, acrylic acid and carbon monoxide terpolymers, ethylene, n-butylacrylate and carbon monoxide terpolymer or blends thereof.

8. The extrudable thermoplastic superabsorbent polymer blend composition of Claim 1 further comprising a surfactant.

9. The extrudable thermoplastic superabsorbent polymer blend composition of Claims 1, 3 or 8 further comprising a polyethylene, a copolymer of polyethylene, a polypropylene, a copolymer of polypropylene or a polystyrene.

10. A method for preparing an extrudable thermoplastic superabsorbent polymer blend composition comprising the step of combining:

- (a) one or more superabsorbent polymer and
- (b) one or more thermoplastic resin comprising a functional group which interacts ionically or covalently with (a).

11. The method of Claim 10 further comprising the step of combining (c) a surfactant.

12. A method for producing an extruded or molded article of an extrudable thermoplastic superabsorbent polymer blend composition comprising the steps of:

- 1) preparing an extrudable thermoplastic superabsorbent polymer composition comprising
 - (c) one or more superabsorbent polymer and
 - (b) one or more thermoplastic resin comprising a functional group which interacts ionically or covalently with (a) and
- 2) extruding or molding said thermoplastic superabsorbent polymer composition into an extruded or molded article.

13. The method of Claim 12 wherein the superabsorbent polymer composition further comprising (c) a surfactant.

14. The method of Claims 12 or 13 wherein the extruded article is a monolayer film, a multilayer film, a nonwoven web, a sheet, a foam, a profile, a multilayer laminate, a fiber, a tube, a rod or a pipe.

15. The method of Claims 12 or 13 wherein the extruded article is a monofilament fiber, a bicomponent monofilament fiber, a spun bond nonwoven web, a melt blown nonwoven web, or a composite comprising combinations thereof.

16. The method of Claims 12 or 13 wherein the extruded article is a nonwoven web comprising a spun bond nonwoven web comprising one or more bicomponent fiber, a melt blown nonwoven web comprising one or more bicomponent fiber, or a composite structure comprising at least one layer of one or more spun bond nonwoven web and at least one layer of one or more melt blown nonwoven web wherein one or more layers of the composite comprise bicomponent fibers.

17. The composition of Claims 1 or 8 in the form of an extruded or molded article.

18. The extruded or molded article of Claim 17 is a monolayer film, a multilayer film, a nonwoven web, a sheet, a foam, a profile, a multilayer laminate, a fiber, a tube, a rod or a pipe.

5 19. The extruded or molded article of Claim 17 is a monofilament fiber, a bicomponent monofilament fiber, a spun bond nonwoven web, melt blown nonwoven web, or a composite comprising combinations thereof.

20. The extruded or molded article of Claim 17 is a nonwoven web comprising a spun bond nonwoven web comprising one or more bicomponent fiber, a melt blown
10 nonwoven web comprising one or more bicomponent fiber, or a composite structure comprising at least one layer of one or more spun bond nonwoven web and at least one layer of one or more melt blown nonwoven web wherein one or more layers of the composite comprise bicomponent fibers.

21. The monolayer film or multilayer film of Claim 18 laminated to a metal.

15 22. A power cable comprising the metal laminate of Claim 21.

23. A communications cable comprising the metal laminate of Claim 21.

24. A power cable comprising the monolayer film or multilayer film of Claim 18.

25. A communications cable comprising the monolayer film or multilayer film of Claim 18.

20 26. A disposable absorbent device comprising an extruded or molded article of Claim 18.

27. The disposable absorbent device of Claim 26 is a diaper, a sanitary napkin, a tampon, an incontinence product, a hospital gown or a bed pad.

25 28. A disposable absorbent device comprising an extruded or molded article of Claim 19.

29. The disposable absorbent device of Claim 28 is a diaper, a sanitary napkin, a tampon, an incontinence product, a hospital gown or a bed pad.

30. A disposable absorbent device comprising an extruded or molded article of Claim 20.

30 31. The disposable absorbent device of Claim 30 is a diaper, a sanitary napkin, a tampon, an incontinence product, a hospital gown or a bed pad.